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Q1 66. (Twice Amended) A method to acquire a monoclonal antibody or scFv/Fab antibody fragment against a target structure comprising the steps of:

(A) exposing a first mounted tissue to an initial antibody library or scFv/Fab antibody fragment library;

(B) eluting directly from the first mounted tissue unbound elements, wherein the unbound elements comprise a first enriched library; and/or

recovering a second enriched library comprising bound elements by cleaving the bound elements from a target structure in the first mounted tissue such that a monoclonal antibody or scFv/Fab antibody fragment remains bound to the first mounted tissue;

(C) amplifying either the first or second enriched libraries;

(D) exposing the the first or second enriched libraries to a second mounted tissue, wherein the second mounted tissue represents a different physiological or pathological state than the first mounted tissue;

(E) eluting directly from the second mounted tissue unbound elements from the second mounted tissue, wherein the unbound elements comprise a third enriched library; and/or

recovering a fourth enriched library comprising elements bound to the second mounted tissue section by cleaving the bound elements from a target structure in the second mounted tissue such that the monoclonal antibody or scFv/Fab antibody fragment remains bound to the second mounted tissue;

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(F) amplifying either the third or fourth enriched libraries; and  
(G) isolating an individual element from either the third or fourth enriched libraries, wherein the individual element is the monoclonal antibody or the scFv/Fab antibody fragment.

67. (Amended) The method of claim 66 further comprising repeating steps (A) to (G).

68. (Amended) The method of claim 66 further comprising repeating steps (D) to (G).

69. (Amended) The method of claim 66 further comprising repeating steps (A) to (C).

70. (Amended) The method of claim 66 further comprising the step of comparing binding of the individual element against the target structure of the first and second mounted tissues.

71. (Amended) The method of claim 70, wherein the binding is specific for a physiological process.

72. (Amended) The method of claim 71, wherein the physiological process is a pathological process, cell development and differentiation, tissue development and differentiation, a drug response, or a naturally occurring degradation process.

91  
cont 73. (Amended) The method of claim 72, wherein the pathological process is inflammation, a secondary tumor deposit or tumor vasculature.

74. (Amended) The method of claim 66, wherein the target structure of the first and second mounted tissues is extracellular or intracellular.


75. (Amended) The method of claim 74, wherein the intracellular target structure is located intranuclear of a nuclear membrane.

76. (Amended) The method of claim 74, wherein the extracellular target structure is on the cell surface or a molecule released from a cell.

77. (Amended) The method of claim 76, wherein the cell is a tumor cell.

78. (Amended) The method of claim 76, wherein the molecule is released actively or passively.

79. (Amended) The method of claim 70, wherein the target structure is a ligand, a receptor, an adhesion molecule, a matrix associated molecule or a combination thereof.

 80. (Amended) The method of claim 70, wherein the target structure is a protein, a carbohydrate, a nucleic acid or a lipid.

81. (Amended) The method of claim 66, wherein the first or second mounted tissue is a frozen tissue section or a fixed tissue section.

82. (Amended) The method of claim 66, wherein the first or second mounted tissue is pretreated with an enzyme or a chemical.

83. (Amended) The method of claim 82, wherein the enzyme pre-treatment is performed with a protease, a polysaccharase, a ribonuclease, a nuclease or a combination thereof.

84. (Amended) The method of claim 66, wherein the tissue is bone marrow cells, lymph cells, sperm cells or cells from cerebrospinal fluid.

85. (Amended) The method of claim 66, wherein the initial library is a combinatorial library.

91  
86. (Amended) The method of claim 85, wherein the combinatorial library is a naive antibody library, a synthetic antibody library, a semi-synthetic antibody library, or a combinatorial library produced by immunizing against one or more target structures.

87. (Amended) The method of claim 66, wherein step (C) of claim 1 comprises amplifying the bound or unbound elements using bacterial cells, PCR synthesis or chemical synthesis.

88. (Amended) The method of claim 66, wherein the monoclonal antibody or scFv/Fab antibody fragment of the initial library further comprises antibody identifying sequence information.

89. (Amended) The method of claim 88, wherein the sequence identifying information is a nucleic acid or a amino acid sequence.

90. (Amended) The method of claim 88, wherein the sequence identifying information is in a filamentous phage or a virus.

91. (Amended) The method of claim 90, wherein the filamentous phage is M13.

92. (Amended) The method of claim 66, wherein the bound elements recovered in steps (B) or (E) comprise a phage and maintain amplification ability.

93. (Amended) The method of claim 66, wherein the cleaving of steps (B) or (E) occurs between minor coat protein pIII and the monoclonal antibody or scFV/Fab antibody fragment.

94. (Amended) The method of claim 66, wherein the cleaving of steps (B) or (E) is a proteolytic cleavage and occurs at a protease recognition site.

95. (Amended) The method of claim 94, wherein the proteolytic cleavage is performed by Ala64-subtilisin or blood clotting factor Xa.

96. (Amended) The method of claim 66, wherein the eluting of steps (B) or (E) is a chemical elution.

97. (Amended) The method of claim 96, wherein the chemical elution is an acid or alkaline elution.

98. (Amended) The method of claim 97, wherein the alkaline elution is triethylamine elution.

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*Q2*  
*Q3*  
Please add the following new claim.

99. (New) The method of claim 66, further comprising repeating steps (A) and (B) to negatively enrich the unbound elements of the first enriched library or to positively enrich the bound elements of the second enriched library.